

## PROCEEDINGS OF THE NEW YORK ENTOMOLOGICAL SOCIETY

MEETING OF JANUARY 15, 1952

The Annual Meeting of the SOCIETY was held January 15, 1952, at the American Museum of Natural History; President Gaul in the chair. There were sixteen members and three guests present. The Treasurer and Secretary presented their annual reports to the Society. The Editor, in his informal report noted that he had a two-year backlog of papers for the JOURNAL. The Secretary then read the report of the Auditing Committee.

The Nominating Committee report was read by Mr. Sam Harriot, as follows:

President: Albro T. Gaul  
Vice-President: Dr. Lucy Clausen  
Secretary: Louis S. Marks  
Assistant Secretary: Dr. Frederick H. Rindge  
Treasurer: Arthur Roensch  
Assistant Treasurer: Mrs. Patricia Vaurie  
Editor Emeritus: Harry B. Weiss  
Editor: Frank A. Soraci  
Associate Editor: Herbert F. Schwarz  
Trustees: E. W. Teale, Dr. Mont A. Cazier,  
E. Irving Huntington, Dr. James Forbes  
Publication Committee: Frank A. Soraci, E.  
W. Teale, Herbert F. Schwarz, John D.  
Sherman, Jr.  
Delegate to New York Academy of Sciences:  
Herbert F. Schwarz

The nominations were closed and Dr. Mullen moved that the Secretary cast one ballot for the slate. This was seconded by Dr. Forbes, and carried.

Mr. Harriot announced that the ZOOLOGICAL RECORD committee still had obtained but \$20.00. The Secretary then called the Society's attention to the death of Dr. G. C. Crampton. He also called attention to the announcements of the SOCIETY meeting in the New York papers and the issuance by the Department of Agriculture of a Catalog of the Hymenoptera North of Mexico. Mr. Teale called attention to some of Dr. Vishniac's recent work.

The speaker of the evening, Dr. Albert Hartzell of the Boyce Thompson Institute then gave a paper on entomological research in Europe. Dr. Hartzell visited laboratories in England, Holland, Belgium, Switzerland and attended the Ninth International Congress on Entomology held in Amsterdam in August where he was a Section Chairman. In connection with the Congress, he pointed out that 55% of the papers were given in English compared with 20% at the Fifth Congress, the last one he attended. He was most interested in the work on insecticides and physiology, and it was heartening to hear how well our European colleagues in Entomology have recovered since the war. The talk was illustrated by motion pictures and slides.

L. S. MARKS, *Secretary*

### ANNUAL REPORT OF THE SECRETARY FOR 1951

Total membership—134—loss of 5.

Honorary—9—gain of 1.

Number of meetings—14.

Average attendance—22.

Greatest attendance—46 at December 4 meeting (Petrunkévitch).

Major correspondence (notices)—4 local mailings.

1. Alpine Field Trip
2. Olsen picnic
3. Petrunkevitch meeting
4. Annual meeting

There were a total of 537 pieces of mail this year. The total cost to the Society was \$9.27. Mr. Herriott of the Field Committee defrayed the expenses of his Committee by his \$5.00 contribution. Total cost to Society, \$4.27.

The Secretary also acknowledges certain supplies received through friends of the Society, at no cost to it.

L. S. MARKS, *Secretary*

Jan. 15, 1952

#### MEETING OF FEBRUARY 5, 1952

A regular meeting of the SOCIETY was held February 5, 1952 at the American Museum of Natural History; President Gaul in the chair. There were ten members and fifteen guests present.

The Secretary called the attention of the Society to the Harvey Lecture to be given at the New York Academy of Science on "Metamorphoses in Lepidoptera" on February 21. The President advised that the Brooklyn Entomological Society had certain numbers of ENTOMOLOGIA AMERICANA for sale.

The speaker of the evening was Mr. Edwin Way Teale who spoke on the trip for his new book, "North with the Spring." To the surprise of the members, Mr. Teale reported that nature books without insects sell best. The trip started in Florida in February and ended in the White Mountains in June. It covered 23 states and in addition to very extensive notes, Mr. Teale took 2400 photographs, many in color. He not only followed Spring north in latitude but also watched its progress in altitude on several mountains. He was on the road a total of 130 days. Because of technical difficulties, Mr. Teale was unable to project his slides, but the Society invited him to show his pictures at a later meeting. The personal portrait of the immense labor involving in writing the book intrigued the members and their guests.

L. S. MARKS, *Secretary*

#### MEETING OF FEBRUARY 19, 1952

A regular meeting of the SOCIETY was held on February 19, 1952, at the American Museum of Natural History; Vice-President Clausen in the chair. There were thirteen members and seven guests present.

Mr. Jacob Fisher, 147-44 Barclay Street, Flushing, New York and Dr. John Rehn, First Army Area Medical Lab., 90 Church Street, New York, New York were proposed for membership.

There being no new or miscellaneous business, Dr. Vishniac then introduced the speaker of the evening, Dr. Louis Roth, who spoke on "Hydroreceptors in Coleoptera." Dr. Roth worked with several species of *Tribolium*. He was interested in factors which attract insects to stored food products, in this case, flour. By a correlation of behavior toward experimental situations with selective surgery on the antennae and palps of the insects, Dr. Roth was able to identify certain sensilla as hydroceptors in *Tribolium*. He pointed out, however, that in other insects where several types of sensilla occur in the same general location, the problem becomes very complicated. Dr. Roth illustrated his talk with lantern slides.

L. S. MARKS, *Secretary*

#### MEETING OF MARCH 4, 1952

A regular meeting of the SOCIETY was held March 4, 1952 at the American Museum of Natural History; President Gaul in the chair. There were twelve members and six guests present. Mr. Jacob Fisher and Dr. John Rehn were elected to membership.

The speaker of the evening was the President of the Society, Mr. Albro T. Gaul, who spoke on "How Insects Fly." Mr. Gaul proposed a new theory

of insect flight. His theory is that the wing muscles vibrate at a sub-harmonic of the wing beats. Each species (at least in the Hymenoptera) used by Mr. Gaul has a constant frequency. By means of an electronic device, the frequency of any portion of the insect thorax was measurable. Such measurements seem to indicate that portions of the thorax do vibrate at subharmonics of the wing frequency.

L. S. MARKS, *Secretary*

#### MEETING OF MARCH 18, 1952

A regular meeting of the SOCIETY was held March 18, 1952 at the American Museum of Natural History; President Gaul in the chair. There were ten members and five guests present.

The President spoke of the need for a Publicity Committee. Dr. Forbes called the attention of the Society to the presentation of Philco Playhouse—a television program—of the life of one of the members of the Society, Mr. Charles Pomerantz.

Mr. Teale commented that the New York Board of Education had banned A. Hyatt Verrill's *Strange Insects and their Stories* because of disparaging remarks on the intelligence of certain groups of insects.

The Society felicitated Mr. Gaul on his recent marriage.

The speaker of the evening, Mr. John C. Pallister of the American Museum of Natural History then spoke on "The Coleoptera." He indicated the vastness of the subject and spoke especially on the function of the elytra in flight, and on the chief divisions of the Coleoptera.

L. S. MARKS, *Secretary*

#### MEETING OF APRIL 1, 1952

A regular meeting of the SOCIETY was held April 1, 1952, at the American Museum of Natural History; President Gaul in the chair. There were fourteen members and one guest present.

Dr. Forbes called the attention of the Society to some of Dr. Vishniac's published pictures in a magazine called PEOPLE TODAY. In connection with these pictures of a "waterstrider" some discussion arose as to whether a waterstrider ever swims below the surface film. Dr. Vishniac called this a legend and said that this error arose because of the popular confusion of backswimmers, Notonectidae, with the waterstriders, Gerridae. It was reported that Osmund Breland, another member of the SOCIETY, had an article in the May issue of PAGEANT (p. 76), "Let Your Children Play with Bugs."

The speaker of the evening, Dr. Herbert Ruckes, spoke on "Colorful Hemiptera." After briefly reviewing the major ordinal classification of the Hemiptera, Dr. Ruckes displayed and discussed different highly-specialized true bugs. Most fascinating were the members of the family Membracidae which develop ornate crests, spines and other odd protuberances which may have no value to the organism. Dr. Ruckes also showed modifications in the forelimbs which are useful in swimming. Two of the most interesting bugs in this group were a very thin flat family and one in which cryptocoloration and form blended with the environment. Dr. Ruckes also explained the oarlike mechanism in the coxa of the Notonectidae.

L. S. MARKS, *Secretary*

#### MEETING OF APRIL 15, 1952

A regular meeting of the SOCIETY was held April 15, 1952, at the American Museum of Natural History; Vice-President Clausen in the chair. There were thirteen members and eight guests present. The Secretary reported on a survey made by Dr. Forbes and himself, of the back numbers of the JOURNAL.

Dr. Vishniac then introduced the speaker of the evening, Dr. Herman T. Spieth of the College of the City of New York, who spoke on "The Insect Cuticle." The insect cuticle is a secreted non-cellular covering whose major

function is protection rather than support. It prevents abrasion of the living tissue and penetration of chemical substance. The cuticle can be divided into an epicuticle, procuticle and epidermis. The procuticle can be further subdivided into an exocuticle and endocuticle. Dr. Spieth pointed out that the outstanding authority on this entire subject is Dr. A. G. Richards, Jr.

The chemical nature of the cuticle is one of extreme interest. The epicuticle contains lipids and protein, the procuticle chitin and protein. The epicuticle appears to defy the laws of physical chemistry and at present it is an unsolved problem.

Dr. Spieth paid tribute to the older insect anatomists who appear in certain cases to have had better insight into some of these problems than their successors.

L. S. MARKS, *Secretary*

#### MEETING OF MAY 6, 1952

A regular meeting of the SOCIETY was held May 6, 1952, at the American Museum of Natural History; President Gaul in the chair. There were fourteen members and twelve guests present.

The Secretary reported that he had represented the Society at the Beta Lambda Sigma dinner for Dr. Carroll Williams. Dr. Forbes, Dr. Mullen and Mr. Pallister also were present at the dinner.

The speaker of the evening was Dr. Roman Vishniac who spoke on "Metamorphosis." He referred to his early (1916) work on the subject and then reviewed the work of Dr. Carroll Williams of Harvard and others. Dr. Vishniac pointed out that according to some authorities there are thirty-two kinds of metamorphosis. Dr. Vishniac explained the subimaginal state in Ephemeroptera as an adaptation from the carboniferous age.

Dr. Williams started his work 10 years ago at the age of 23. His contributions, which have been brilliantly illustrated in LIFE by the pictures of Dr. Vishniac, put the subject of metamorphosis on an endocrinal basis. Certain areas of the brain secrete a hormone which activates the prothoracic glands which in their turn, by hormonal activity, cause the phenomenon of metamorphosis.

L. S. MARKS, *Secretary*

#### MEETING OF MAY 20, 1952

A regular meeting of the SOCIETY was held at the American Museum of Natural History on May 20, 1952. The President asked Dr. Forbes to serve as secretary for the meeting in the absence of the Secretary, Mr. Marks. There were fourteen members and seven guests present.

Mr. Harriot, Chairman of the Field Committee, reminded the members of the field trip to Alpine, New Jersey, which was scheduled for Sunday, May 25.

The Chairman of the Program Committee, Dr. Vishniac, then introduced Mr. E. W. Teale who showed some of the Kodachromes taken during his trip while gathering material for his recent best-seller, "North with the Spring." These were the pictures he was unable to show when he previously spoke to the Society about his trip. The members were very pleased to have the opportunity to see Mr. Teale's fine pictures.

At the conclusion of Mr. Teale's talk, an opportunity was given to other members to show pictures. Dr. Lucy Clausen showed pictures of insects on postage stamps and a tomato-worm carrying braconid cocoons. Dr. Vishniac showed pictures of waterstriders, amoeba in division, and aquatic invertebrates.

The President asked Dr. Vishniac what the plans were for the first meeting in October. He reported that Dr. Collins, New York State Entomologist, will be the speaker at the October 7 meeting, and the second meeting in October will be devoted to the summer collecting activities of the members.

JAMES FORBES, *Secretary pro tem.*